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throughout its duration to be carefully controlled; the initial content of the compositions in terms of blowing agent and of crosslinking agent (in the case of chemical crosslinking) is, of course, tailored to this effect, as are the durations and temperatures of the heat treatments. However, whatever the operating conditions thus selected, the product is in the liquid-solid transition state during the combined crosslinking and expansion; it is tacky, difficult to handle or even runny, in which case it is liable to conform to the surface of the oven against which it rests by adhering thereto, free expansion then being prevented, which, finally, is to the detriment of the surface appearance of the product obtained (presence of irregularities in streaks, wrinkles, etc.).

[Page 2, line 37 to page 3, line 9 read as follows:]

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However, a third approach is more frequent than the first two. This is the approach of the Hitachi and Furukawa processes, using a horizontal oven having three zones of gradual heating. In the three zones, the operations of precrosslinking/conditioning to a temperature below the decomposition temperature of the blowing agents of a first expansion phase at a moderate temperature and then of a second phase for completing the expansion at a higher temperature are carried out, respectively. In order to prevent the relatively tacky intermediate product from adhering to its support so as subsequently to disturb the development of the expansion, this support possibly consists, in places, of air cushions.

[Page 3, line 38 to page 4, line 10 read as follows:]

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According to another advantageous characteristic with a view to an industrial production operation, the process is carried out continuously, the preferred case of the abovementioned sheet, the latter then consists of a continuous web. This web comes from a wound roll or consists of an extruded product. A horizontal oven is then preferably used, especially of the type having three zones (the Hitachi and Furukawa processes mentioned

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above), generally in simplified versions without air cushions. This is because, as explained in detail below, the invention solves, to a large extent and in another manner, the problem of the product to be expanded adhering to the surface of the oven.

[Page 5, lines 1-5 read as follows:]

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At a given moment before the expansion, the product is usually in a tacky, or even runny, state, especially due to the effect of an increase in temperature. The adhesion of the support to one face of the intermediate product then simply results by applying one against the other.

[Page 6, lines 1-4 read as follows:]

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The use of one support results in denser foams than that having two supports. This is because the blowing gas is capable of escaping via the free surface of the product, that is to say the unsupported surface.

IN THE CLAIMS

Please cancel all of the claims now in the case, i.e., Claims 1-9, and substitute the following Claims 10-17 in their place:

10. (New) A process for preparing a sheet of a crosslinked polyolefin foam expanded in an essentially unidirectional expansion only in its thickness, comprising either:

a) adhering a support to one or both faces of a crosslinked intermediate polyolefin sheet to be expanded, these faces being perpendicular to the direction of expansion, and unidirectionally expanding the so formed sheet only in its thickness, or

b) surface-crosslinking one or both faces of an intermediate polyolefin sheet to be expanded, these faces being perpendicular to the direction of expansion, and expanding and crosslinking the so formed sheet only in its thickness.